

# START

009454

May 18, 1990

Meeting Minutes Transmittal/Approval  
Unit Managers Meeting: General Topics  
450 Hills Street, Room 47  
May 16, 1990

From/ Appvl. Robert K. Stewart Date: 6/12/90  
Robert K. Stewart, R.I. Coordinator, DOE-RL (A6-95)

Appvl.: Doug Sherwood Date: 6/12/90  
Douglas W. Sherwood, Representative, EPA (A7-70)

Appvl.: Larry Goldstein Date: 6/12/90  
Larry Goldstein, CERCLA Unit Supervisor, Washington Dept. of Ecology

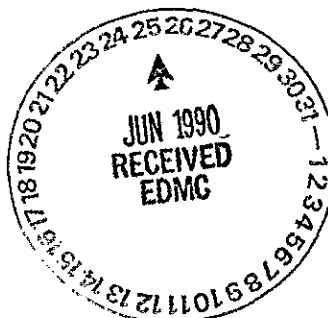
The purpose of this meeting was to discuss general topics which are common to all operable units.

Meeting Minutes are attached. Minutes are comprised of the following:

- Attachment #1 - Meeting Summary/Summary of Commitments and Agreements;
- Attachment #2 - Agenda for the meeting;
- Attachment #3 - Attendance List;
- Attachment #4 - Action Items Status List;
- Attachment #5 - Administrative Record Status
- Attachment #6 - RDDT&E Synopsis
- Attachment #7 - Status of Surplus Reactors EIS
- Attachment #8 - DOE 5-Year Plans
- Attachment #9 - Changes to the TPA
- Attachment #10 - Status of the Becker Drilling Test
- Attachment #11 - Status of the Background Determination
- Attachment #12 - Proposed Revision to Handling of Study Wastes

Prepared by: [Signature] Date: 12 June 1990  
SWEC USSC

Concurrence by: [Signature] Date: 6-12-90  
WHC ER Programs



Distribution:

Dave Einan, EPA (A7-70)  
Doug Sherwood, EPA (A7-70)

Chuck Cline, WDOE

R.O. Patt, Oregon Water Resources Dept.

Ward Staubitz, USGS

Donna Lacombe, PRC

Russell Fitzpatrick, SWEC (A4-35)

C.E. Clark, DOE-RL (A6-95)  
D.L. Clark, DOE-RL (A5-55)  
Julie Erickson, DOE-RL (A6-95)  
R.D. Freeberg, DOE-RL (A6-95)  
R.E. Gerton, DOE-RL (A6-80)  
Jim Goodenough, DOE-RL (A6-95)  
R.D. Izatt, DOE-RL (A6-95)  
Paul Pak, DOE-RL (A6-95)  
Jim Rasmussen, DOE-RL (A6-95)  
Bob Stewart, DOE-RL (A6-95)  
Mike Thompson, DOE-RL (A6-95)  
S.H. Wisness, DOE-RL (A6-95)

Melvin Adams, WHC (H4-55)  
Frank Calipristi, WHC (B2-35)  
Steve Clark, WHC (H4-55)  
Larry Hulstrom WHC (H4-55)  
Wayne Johnson, WHC (H4-55)  
Alan Krug, WHC (H4-55)  
Merl Lauterbach, WHC (H4-55)  
Fred Roeck, WHC (H4-55)  
Kaerae Parnell, WHC (H4-18)  
Jim Patterson, WHC (B2-15)  
Steve Weiss, WHC (H4-55)  
Tom Wintczak, WHC (B2-15)  
R.D. Wojtasek, WHC (B2-15)

Don Kane, EMO (K1-74)  
Terri Stewart, PNL (K2-12)

ADMINISTRATIVE RECORD (1100-EM-1, 300-FF-1, 300-FF-5, 200-BP-1, 100-HR-1, 100-HR-3, 100-BC-1, 100-BC-5, 100-NR-1, 100-NR-3)[Care of Susan Wray, WHC]

Attachment #1  
Meeting Summary and Summary of Commitments and Agreements  
General Topics Unit Managers Meeting  
450 Hills St., Room 47  
May 16, 1990

Meeting Summary/Summary of Commitments and Agreements

1. David Myers, SWEC, presented areas where the trial system of handling Unit Manager Meeting Minutes needed revision. To enable the system to work efficiently, revisions need to be returned to SWEC in a more expeditious manner. Ecology's copies of the minutes will be forwarded by 1st Class mail as opposed to Telefax or Express Mail. Ecology stated that the urgency for review is not as great as anticipated when setting guidelines for the TPA.
2. Brian Sprouse (WHC) presented an update on the Administrative Record file with respect to the number of records submitted over the past month. It was determined that data access from repositories outside of Richland would be handled on a request basis. General instructions for requesting additional information are available at the repositories. However, more detailed instructions may be needed for data requests. An update on remote access to the Hanford Data Base will be provided at the June UMM. Special training sessions to familiarize regulatory personnel with the Hanford Groundwater Data Base will be held as that system becomes available to the agencies in June 1990. Notes from this presentation are found in Attachment 5.

Action # GT.45: A brief training session will be presented on designation of documents for inclusion in the ARF. This presentation will be based on the types of documents noted for inclusion by the Unit Managers. Differences in notation will be discussed so that consistent referral will be made irregardless of individual Managers. Action Brian Sprouse.

3. Terri Stewart presented an update of ongoing Research Development Demonstration Testing and Evaluation (RDDT&E). A synopsis of her presentation is found in Attachment 6.

Action # GT.46: RDDT&E activity updates will be presented to the Unit Managers on a quarterly basis. Where specific activities are being conducted within an Operable Unit those RDDT&E functions will be discussed at that Unit Managers Meeting. The ISV work at 116-B-3 will be discussed at the next 100-BC-1/-5 meeting. Action Jim Patterson

Action # GT.47: Ecology will assess the appropriateness of updating RDDT&E activities as part of the quarterly public meetings. This item will be brought up at the Project Managers Meeting. Action J.E. Rasmussen

4. Jim Goodenough reported on the current status of the Defense Reactor EIS. At this point no decision has been finalized. As funding for the

EIS expires with the current fiscal year, a decision is expected before September 30. Notes from this presentation are found in Attachment 7.

5. Julie Erickson reported on the Hanford specific 5-year plan. The schedule for updating of the National and local plans was presented. It was emphasized that the Hanford specific plan complies and conforms with the national plan. Notes from this presentation are found in Attachment 8.
6. Linda Powers, WHC, presented a synopsis of changes to the Hanford Federal Facility Agreement and Consent Order. Only minimal changes have been made to the legal agreement. The only milestone changes in the proposed revision are the addition of features related to Land Disposal Restrictions. Notes from this presentation are found in Attachment 9.
7. Don Moak, WHC, presented a status of the Becker Drilling test currently underway. The discussion provided the most current thinking on the pros and cons of using this method at Hanford. To date, the drill cuttings containment system has worked very well. A means to contain diesel exhaust particulates has been designed and implemented. The system contains about 90% of the exhaust particulates. The method has proven to be fast, but manpower intensive. There are difficulties associated with the completion of monitoring wells at the depths necessary on the 200 Area plateau. Notes from this presentation are found in Attachment 10.

Action # GT.48: WHC to ascertain if a report or update on the Becker drilling program is appropriate for the July or August UMM. Action Don Moak/Jim Patterson

8. Jim Hoover, WHC, presented a status of the program to ascertain background in soils and groundwater. This work is currently being funded solely by the RCRA TSD program. It was noted that the information is essential for the CERCLA and RCRA Past Practices program at this time. Notes from this presentation are found in Attachment 11.

Action # GT.49: The plan for the Background Strategy is to be delivered to DOE for review by June 1990. This plan is to include a brief discussion of estimated costs and associated schedules for determining background in both media. Action Jim Hoover, WHC

Action # GT.50: WHC to develop a plan for determining background using both TSD and Past Practices Operable Units. Initial efforts will be focused on the near-term (interim measure) while assuring consistency for longer term (site-wide) determination. Action J. Hoover and RI Coordinators (TSD and PP units)

9. Jim Mohatt, WHC, presented a proposed revision to in-place procedures for the handling of wastes generated during site investigations. It was recognized that there are potential differences between the requirements for RCRA and CERCLA generated investigation wastes. Notes from this presentation are found in Attachment 12.

Action # GT.51: A committee will be formed over the next several weeks to develop and propose an alternative procedure for study generated waste. The committee is to have representatives from DOE, WHC Field Services, WHC Regulatory Analysis, WHC Projects, WHC EET, WHC/DOE Legal and KEH. Action Bob Stewart

Action # GT.52: A determination of impacts to the TPA that are anticipated due to implementation of DOE Orders is needed. What are the plans for integrating these orders into activities conducted under the TPA? Ecology and EPA need copies of the "Hanford Waste Management and Environmental Restoration Integration Plan" at the earliest time possible. Action J. Rasmussen/J. Goodenough

10. Doug Sherwood, EPA, announced an imminent move for EPA's Hanford Office. The move was to take place before June 1. An inspection of the proposed office by GSA revealed the presence of asbestos in the ceilings. Due to this finding, the move is on hold and will not occur until suitable space is located. There is no change in mailing address or MSIN.

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**Attachment #2**

**General Topics Unit Managers Meeting Agenda  
May 16, 1990  
450 Hills Street, Room 47**

**9:00 - 9:30**

**Approval of April's Unit Managers Meeting Minutes - Jerry Chiaramonte**

**Administrative Record Review - Brian Sprouse**

**9:30 - 10:30**

**EIS Preferred Alternative for the 100 Area Reactor Decommissioning -  
Jim Goodenough**

**RDDT&E Update - Teri Stewart**

**10:30 - 11:00**

**Site Specific Five Year Plan - Julie Erickson**

**11:00 - 11:30**

**Tri-Party Agreement Update - Linda Powers**

**11:30 - 12:00**

**Becker Drill Demonstration Update - Don Moak**

**12:00 - 1:00**

**Lunch**

**1:00 - 1:30**

**Soils and Groundwater Background Strategy Update - Jim Hoover**

**1:30 - 3:00**

**Handling of RI/FS Waste Materials - Bob Stewart**

**Action Items Status - Jerry Chiaramonte**

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Attachment #3  
Attendance List  
General Topics Unit Managers Meeting  
May 16, 1990

Name	Org.	Phone
Dave Einar	EPA	509-376-3883
Doug Sherwood	EPA	509-376-9529
Chuck Cline	WDOE	206-438-7556
Larry Goldstein	WDOE	206-438-7556
Steve Cross	WDOE	206-438-6675
Julie Erickson	DOE-RL	509-376-3603
Jim Goodenough	DOE-RL	509-376-7087
Doug Hildebrandt	DOE-RL	509-376-7287
Paul Pak	DOE-RL	509-376-4798
Jim Rasmussen	DOE-RL	509-376-2247
Bob Stewart	DOE-RL	509-376-6192
Mike Thompson	DOE-RL	509-376-6421
Nancy Werdel	DOE-RL	509-376-5500
David Myers	SWEC/IT	509-376-0969
Doug Fassett	SWEC	509-376-9969
Russell Fitzpatrick	SWEC	509-376-3502
Brian Drost	USGS	206-593-6510
Ward Staubit	USGS	206-593-6510
Donna Lacombe	PRC	206-624-2692
Jerry Shuster	PRC	206-624-2692
Walt Alaconis	WHC	509-376-9357
Jil Frain	WHC	509-376-8941
Jim Hoover	WHC	509-376-2668
Larry Hulstom	WHC	509-376-4034
Alan Krug	WHC	509-376-5634
Rick McCain	WHC	509-376-0777
Don Moak	WHC	509-373-3501
Jim Mohatt	WHC	509-373-5566
Jim Patterson	WHC	509-376-0568
Linda Powers	WHC	509-376-6204
Fred Ruck	WHC	509-376-9876
Ed Smith	WHC	509-376-0234
Brian Sprouse	WHC	509-376-2530
Steve Weise	WHC	509-376-1683
Terri Stewart	PNL	509-376-5957

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Attachment #4  
Action Items Status List  
General Topics Meeting  
May 16, 1990

Item No.	Action	Status
ST1.6	EPA and Ecology requested that they be supplied with the report documenting the results of the Becker drilling and containment system test. W.H. Price (WHC) will supply a copy of the report for EPA and Ecology's on-site review. After clearance, copies of the report will be provided.	Open Test has started. The initial test borings were completed, and the method found appropriate for trial at the U-17 site. Problems with the deeper hole have resulted in timing delays for completion of the test. The final report will be provided to EPA/Ecology when the test is completed.
GT.18	WHC will develop a small team for the purpose of developing a Hanford-specific guidance document. The committee is to include members from EPA/Ecology, SWEC/IT, and PNL/EMO as well as WHC. Action: Tom Wintczak	Open Deferred pending closure of streamling issue.
GT.23	A strategy document for assessing background chemistries for soils and groundwater will be available for review by March 26, 1990. Action: Jim Hoover	Open This effort remains on going. A presentation on this subject was provided at the May GT meeting. The planning document is due to DOE-RL in June 1990.
GT.30	Within two weeks of delivery of the narrative (per GT.29) to EPA and Ecology, Ecology will provide suggestions for the integration of RCRA TSD activities into that strategy. Action: T. Michelena/ L. Goldstein, Ecology	Open May 8, 1990 meeting, 9:00 AM at 450 Hill St., Room 35, will be held to discuss the document.
GT.31	DOE/WHC is to develop an implementation plan for the strategy associated with the logic diagram on source/groundwater operable unit integration and streamlining. This plan is to include schedule and budget impacts associated with implementation. Action: K.M. Thompson, April UMM.	Open Presentation of the plan during the May, Unit Managers Meeting.

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GT.32	DOE/WHC will prepare to provide additional briefings to Ecology and EPA management on the proposed integration and streamlining strategy. The regulatory agencies are to identify the need for such briefings by March 27, 1990. Action EPA and Ecology	Open Till after the May 8th meeting.
GT.35	WHC will provide a current cost breakdown for drilling of groundwater monitoring wells at Hanford. These costs are to include both capital and expense features. Action: K.R. Fecht	Open Additional RCRA well drilling information will be available by the end of the month.
GT.36	WHC will investigate creating a past practice category for the Administrative Record Index, Generic form file system that will identify all units that would tie into the aggregate operable unit. Action: Brian Sprouse	Closed The index can be alligned at any time to meet the stated needs of the Unit Managers. The tie-in for items in the generic file already exists and is operational.
GT.37	<i>WHC will assess how supporting data should be stored and made available (should data be part of Administrative Record?).</i> Action: Brian Sprouse	Closed Not all data must be included in the Admin. Record File, only those data used in reaching the ROD. All data are available to the general public either has hard copy or microform. Regulatory agencies will soon have electronic access to the data files.
GT.38	If possible, at the May Unit Managers Meeting a presentation on the approved, preferred alternative method for disposal of the reactors will be given. Action: Jim Goodenough.	Open The final decision has not yet been made. A presentation will be made to the Unit Managers at the earliest meeting following formalization of the proposed action.
GT.39	EPA has requested a copy of the EIS from WHC/DOE. Action: Jim Goodenough.	Closed EIS was delivered during afternoon session of April UMM.

GT.40	PNL will provide an update on the HEIS during the June Unit Mangers Meeting and will, for all interested parties give a demonstration of the system capabilities.	Open
GT.41	A meeting with DOE, WHC, EPA, and Ecology will be held on May 8, 1990 at 450 Hill, Room 35 to discuss and make modification in the Integration Strategy.	Open The meeting date was cancelled due to conflicting schedules. The meeting will be rescheduled after EPA-HQ comments have been received.
GT.42	Mike Thompson will give an update on the Integration Strategy and the Implementation Plan for the Integration Strategy at the May General Topics Unit Managers Meeting.	Open No action has taken place on the strategy. The strategy is being implemented in part as on going work plans are developed.
GT.43	A follow up meeting will be scheduled with EPA, Ecology, DOE and WHC to discuss the apparent conflicts between NEPA and RCRA/CERCLA activities. Action Paul Dunigan	Open
GT.44	The site land use and point of compliance will be discussed at the next General Topics Unit Mangers Meeting. Action: Mel Adams	Open Scheduled for the June UMM.

# ENVIRONMENTAL DATA MANAGEMENT CENTER ADMINISTRATIVE RECORD FILE STATUS CHART

AS OF 05/05/90

## O.U.'s

1100-EM-1 (U001)

300-FF-1 (U002)

200-BP-1 (U003)

100-HR-1 (U004)

100-HR-3 (U005)

100-BC-1 (U006)

100-DR-1 (U031)

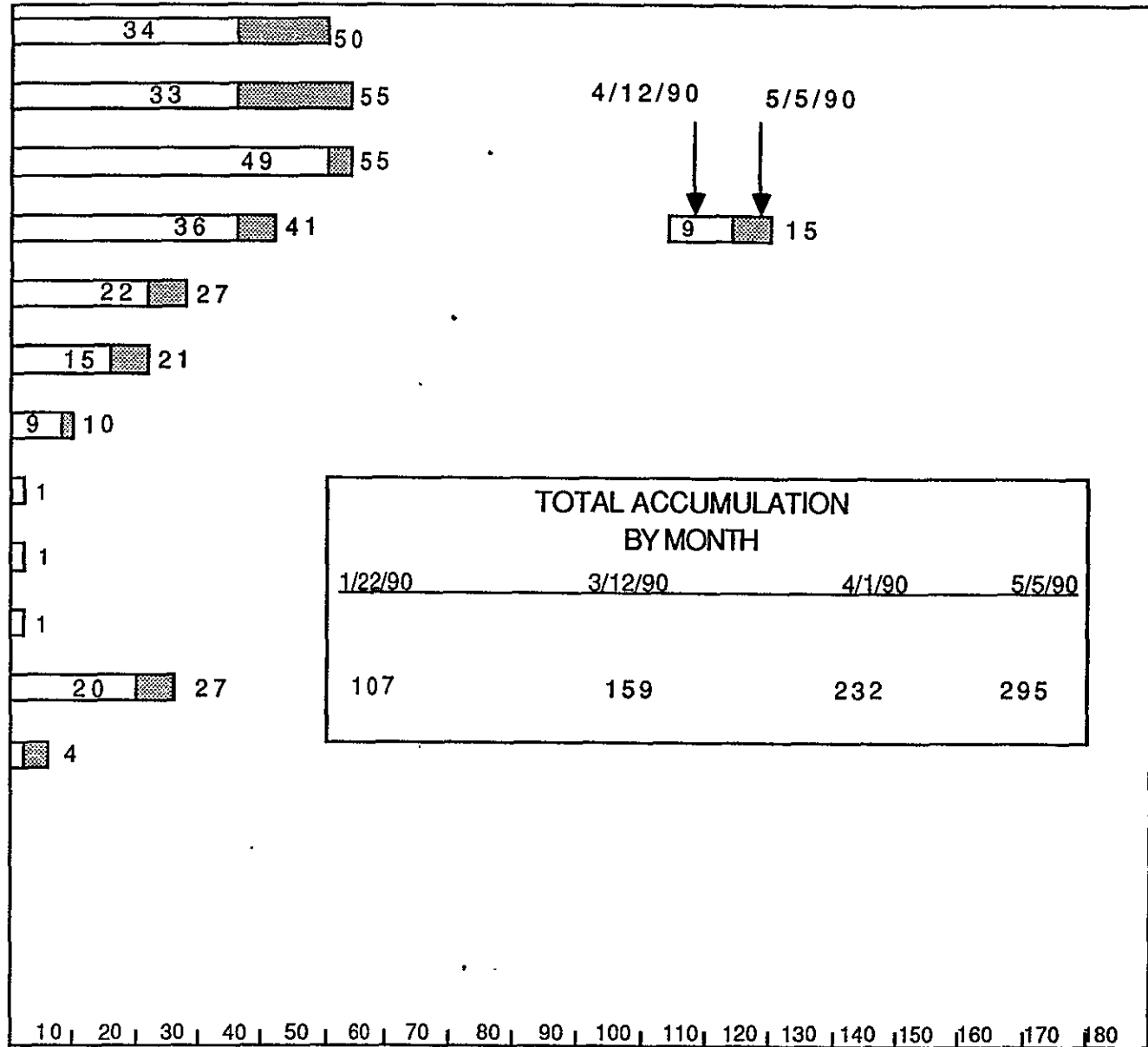
200-BP-11 (U036)

1100-EM-2 (U050)

100-FR-1 (U094)

300-FF-5 (U103)

100-BC-5 (U111)



SCALE: 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180

LAST MONTH 10 NUMBER OF RECORDS  
THIS MONTH 10

## **ACTION ITEMS**

### **1. DEVELOP A METHOD FOR MAKING DATA AVAILABLE TO THE PUBLIC. IDENTIFY A METHOD FOR REMOTE ACCESS TO THE DATA**

- DATA DOES NOT HAVE TO BE IN AN ADMINISTRATIVE RECORD TO BE PUBLICLY AVAILABLE.**
- DATA IS CURRENTLY AVAILABLE AND CAN BE REQUESTED.**
- DATA CAN BE MADE AVAILABLE IN EITHER HARD COPY, MICROFORM OR ELECTRONICALLY. ELECTRONIC REMOTE ACCESS TO ENVIRONMENTAL INFORMATION IS CURRENTLY BEING PERSUED BY WESTINGHOUSE.**

## **ACTION ITEMS**

(CONTINUED)

### **2. IDENTIFY THE NEED FOR A SUB-CATAGOREY IN THE GENERIC FILE FOR PAST PRACTICE OPERABLE UNITS.**

- THE GENERIC FILE IS FOR ALL TYPES OF INFORMATION REGARDLESS OF ITS APPLICABILITY.**
- THE GENERIC FILE IS A TOOL USED BY EDMC TO ELIMATE THE NEED TO MAKE VOLUMINOUS AMOUNTS OF COPIES OF COMMONLY USED DOCUMENTS.**
- DOCUMENTS CAN BE IDENTIFIED AS OU, TSD OR PAST-PRACTICE SPECIFIC BY THE UNIT MANAGERS TO AID IN ASSIGNMENT OF THE DOCUMENT TO THE VARIOUS ADMINISTRATIVE RECORDS.**

Attachment # 6  
RDDT&E Status  
TL Stewart

Presented to Unit Manager's Meeting  
May 16, 1990

0 2 7 1 1 3 6 1 1 3 6

The Office of Technology Development (OTD) funds and manages the research, development, demonstration, testing, and evaluation (RDDT&E) program being conducted at Hanford. The OTD objective is to provide technology that meets the needs of the Waste Management Operations and Environmental Restoration Programs in a timely manner. These technologies will be directed toward improving performance in the field, reducing cost for restoration and operation, and improving schedules. To meet these objectives, OTD is strongly emphasizing the need to work collaboratively with technical experts throughout the DOE system, in other Federal Agencies, and industry. Within the demonstration, testing, and evaluation (DT&E) portion of the program, there are three activities currently under way to facilitate this type of collaboration. These activities are described below with a brief discussion on the potential Hanford role.

- o Collaboration between National Laboratories: An Integrated Demo is under way at Savannah River that is using technical experts from the National Laboratories to demonstrate characterization, monitoring, and remediation of TCE. The core of the demonstration is the use of horizontal wells for each of these three activities. The remediation will include both soil-gas extraction and bioremediation. A second site is being considered for further evaluation of the use of horizontal wells; Hanford sites have been discussed as candidates.
- o Collaboration with EPA: Two EPA-Office of Research and Development (ORD) technologies are being considered for demonstration in the 300-FF-1 operable unit (specifically the North Process Pond): soil washing and grouting. The EPA-ORD has developed and demonstrated soil washing technology for application to hazardous waste sites; EPA-Office of Radiation Protection has had recent experience designing a system to wash radioactive contaminated soils. Opportunities to transfer soil washing technology from EPA to DOE either via staff or equipment are being explored.

In addition, Wastech is one of the EPA Superfund Innovative Technology Evaluation (SITE) contractors. They have expressed an interest in demonstrating an above-ground immobilization (grouting) technology on mixed waste. Contaminant and soil information is being reviewed by Wastech at this time to determine the feasibility of conducting treatability tests this calendar year.

- o Industrial Participation: A recent Commerce Business Daily announcement indicated that the OTD was interested in receiving proposals for R&D and DT&E in four areas: groundwater remediation, soil remediation, interim containment, and 3-dimensional imaging. Through this procurement, available technology can be used to demonstrate technologies on appropriate DOE sites.

Sites for these activities are being selected to integrate with early RI/FS activities or potential interim actions. This approach maximizes the sharing of information and costs between the Technology Development and Environmental Restoration Programs.

In addition to these efforts, there are technology demonstration activities under way at Hanford. These include the following:

- o In Situ Vittrification of 116-B-6A Crib - test run completed April 23
- o Drilling Technology - Becker Drill demonstration under way
- o In situ water level sensor system - sensor and data logger system being field tested this year
- o Biological Treatment of U1/U2 Groundwater - compliance notebook being prepared for system that will be used on actual groundwater
- o In Situ Vittrification of Underground Tanks - NEPA documentation review for pilot-scale test on simulated tank and tank wastes
- o In situ Bioremediation - collect field data including hydrogeologic, chemical, and biological characteristics needed to design an in situ biological treatment system
- o Protective Barrier Prototype - design and NEPA documentation under way for prototype to be constructed in FY 1991

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Attachment #7

May 14, 1990

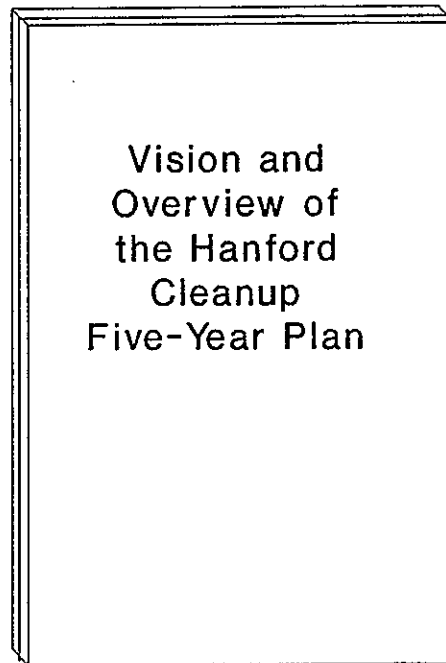
**SURPLUS PRODUCTION REACTOR DECOMMISSIONING FEIS  
DECISION BRIEFING**

**NEXT ACTIONS:**

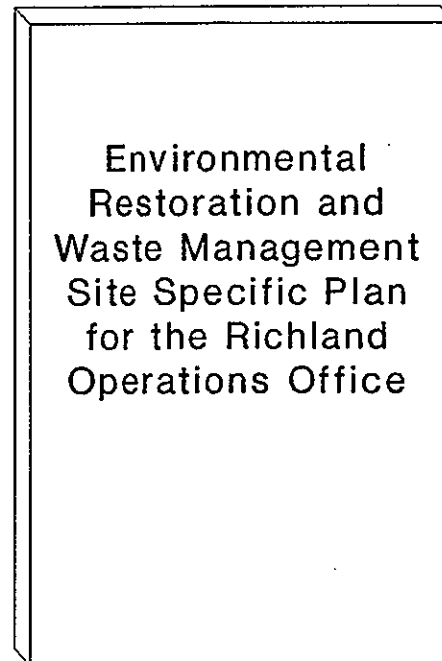
1. Obtain RL Manager decision on recommended preferred alternative.
2. Brief HQ-EM Program Office (Lehr). Obtain EM-Program Office concurrence on recommended preferred alternative.
3. Forward RD #3 to EM-1 (Leo Duffy) from Mike Lawrence (Per SEN-15) for EM and EH review/comments.
4. Advise Ecology of the recommended preferred alternative (Lawrence to Silver).
5. Incorporate HQ-EM and EH comments. Publish the FEIS (Addendum).
6. Forward FEIS to EM-1 for approval with draft "Record of Decision."
7. Obtain EM-1 and EH-1 approval of the Final EIS (Addendum).
8. Obtain EM-1 and EH-1 concurrence/approval of the ROD.
9. Brief Congressional staff and Washington Department of Ecology on the FEIS and ROD.
10. Publish the FEIS and ROD in the Federal Register.



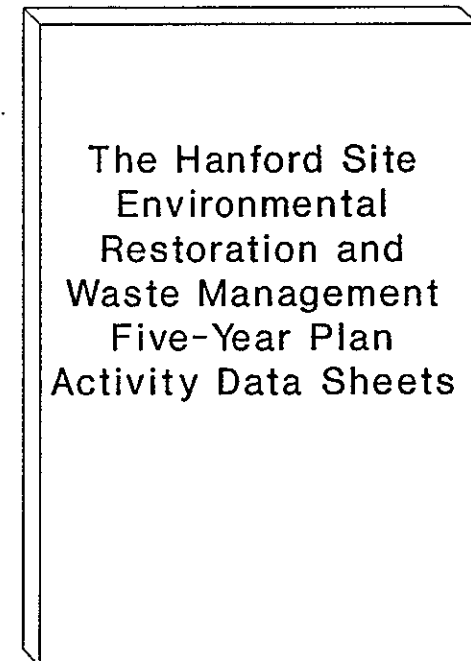
# HANFORD SITE SPECIFIC PLAN



General Public  
Internal



DOE-HQ  
Technical Public  
States  
Government Agencies



DOE-HQ  
Technical Public  
States  
Government Agencies

## **SCHEDULE FOR FIVE-YEAR PLAN**

- **First National Plan issued September 1, 1989**
- **Detailed Hanford Site Specific Plan public comment period April 20 - July 19, 1990**
- **Second National Plan due to be issued June 1990  
(Subsequent National Plans to be issued in May)**
- **Second Hanford Site Specific Plan due to be issued  
by September 1990, (Subsequent Site Specific Plans  
to be issued in August-September)**

# **PUBLIC MEETINGS ON HANFORD CLEANUP FIVE-YEAR PLAN**

<u><b>Date</b></u>		<u><b>Location</b></u>
<b>May 22, 1990</b>	<b>Tuesday</b>	<b>Spokane, Washington</b>
<b>May 23, 1990</b>	<b>Wednesday</b>	<b>Walla Walla, Washington</b>
<b>May 30, 1990</b>	<b>Wednesday</b>	<b>The Dalles, Oregon</b>
<b>May 31, 1990</b>	<b>Thursday</b>	<b>Pendleton, Oregon</b>
<b>June 5, 1990</b>	<b>Tuesday</b>	<b>Yakima, Washington</b>
<b>June 6, 1990</b>	<b>Wednesday</b>	<b>Kennewick, Washington</b>
<b>June 12, 1990</b>	<b>Tuesday</b>	<b>Bellevue, Washington</b>
<b>June 13, 1990</b>	<b>Wednesday</b>	<b>Portland, Oregon</b>
<b>June 14, 1990</b>	<b>Thursday</b>	<b>Astoria, Oregon</b>

# **TRI-PARTY AGREEMENT REVISIONS**

- o CORRECTIONS/UPDATES**
- o CLARIFICATIONS/IMPROVEMENTS**
- o LAND DISPOSAL PROVISIONS**

# **TRI-PARTY AGREEMENT REVISIONS**

## **CORRECTIONS/UPDATES**

- o INCORRECT OR OUTDATED REGULATORY CITATIONS**
- o TYPOGRAPHICAL ERRORS AND OMISSIONS**
- o ORGANIZATIONAL CHANGES**
- o FINAL PLACEMENT ON NATIONAL PRIORITIES LIST**

# **TRI-PARTY AGREEMENT REVISIONS**

## **CLARIFICATIONS/IMPROVEMENTS**

- o QUALITY ASSURANCE REQUIREMENTS FOR LABORATORIES**
  - INCREASED SPECIFICITY OF REQUIREMENTS**
  - DEVELOPMENT OF NEW ACTION PLAN SECTIONS 6.5 AND 7.8**
- o DOCUMENT REVISIONS**
  - ALLOW MINOR CHANGES WITHOUT REISSUING ENTIRE DOCUMENT**
- o SUPPLEMENTAL WORK PLANS**
  - PLACE INTO PUBLIC INFORMATION REPOSITORIES; NO FORMAL PUBLIC REVIEW PROCESS**

## **CLARIFICATIONS/IMPROVEMENTS (Continued)**

- o UNIT MANAGERS MEETINGS**
  - REQUIRED ONLY WHEN WORK STARTS (E.G., WORK PLAN OR PERMIT APPLICATION SUBMITTED)**
- o DATA REPORTING REQUIREMENTS**
  - ELECTRONIC DATA REMOTE ACCESS CAPABILITIES**
  - LABORATORY TURNAROUND TIMEFRAMES**
- o SUPPORTING TECHNICAL PLANS AND PROCEDURES**
  - EXAMPLES INCLUDE PURGE WATER MANAGEMENT PLAN, DATA VALIDATION GUIDELINES, DATA QUALITY STRATEGY**

# **TRI-PARTY AGREEMENT REVISIONS**

## **LAND DISPOSAL REQUIREMENTS**

- o PROVISIONS FOR CONTINUED STORAGE PENDING AVAILABILITY OF ACCEPTABLE TREATMENT**
- o DEVELOPMENT OF LDR PLAN FOR HANFORD MIXED WASTES**
  - LDR MIXED WASTE INVENTORY**
  - LDR MIXED WASTE CHARACTERIZATION AND TREATMENT SCHEDULES**
- o PROVISIONS FOR USE OF LERF FOR 242-A EVAPORATOR EFFLUENT**



**FINAL CHANGES TO BE RELEASED FOR PUBLIC REVIEW AND COMMENT**

Article VIII, Dispute Resolution, paragraph 29.B., revise DOE official:

DOE's designated member of the DRC is the Assistant Manager for Environmental Management of the Richland Operations Office.

Correct typo, Article XIII, Work, paragraph 38:

Reference should be Chapter 7.0 rather than Chapter 6.0

Article XV, Resolution of Disputes, paragraph 50.D., revise DOE official:

DOE's representative on the DRC is the Assistant Manager for Environmental Management of the Richland Operations Office.

Replace Article XXX, Quality Assurance, paragraph 94:

94. Throughout all sample collection, preservation, transportation, and analyses activities required to implement this Agreement, DOE shall use procedures for quality assurance, and for quality control, in accordance with approved EPA methods, including subsequent amendments to such procedures. The DOE shall comply with the "Data Quality Strategy for Hanford Site Characterization" (as listed in Appendix F of the Action Plan) and Sections 6.5 and 7.8 of the Action Plan. For special circumstances, other procedures approved by the lead regulatory agency may be used. The DOE shall use methods and analytical protocols for the parameters of concern in the media of interest within detection and quantification limits in accordance with both QA/QC procedures and data quality objectives approved in the work plan, RCRA closure plan or RCRA permit. The EPA or Ecology may require that DOE submit detailed information to demonstrate that any of its laboratories are qualified to conduct the work. The DOE shall assure that EPA and Ecology (including contractor personnel) have access to laboratory personnel, equipment and records related to sample collection, transportation, and analysis.

Replace Article XXXV, Sampling Data/Document Availability, paragraph 101:

101. The DOE shall transmit the results of laboratory analytical data and non-laboratory data collected pursuant to this Agreement to EPA and Ecology in an expeditious manner, as specified in Section 9.6 of the Action Plan.

Article XXXVII, paragraph 106, fourth sentence, correct typo:

"...obtain access agreements that: provide that no conveyance..."

ARTICLE XLVIII, paragraph 143, correct paragraph reference on last line of page 75:

Change "Paragraph 127" to Paragraph 143.

Executive Summary, page 2, CERCLA, second paragraph, insert following after third sentence:

These four areas were officially listed on the NPL on November 3, 1989 (Federal Register 41015, October 4, 1989).

Executive Summary, page 10, Current Status, last bullet, delete opening phrase:

"In anticipation of being listed on the NPL,"

Section 3.1, fourth paragraph, next to last line, correct typo:

"u nits" to units

Section 3.4.2, second bullet, after "Priority Waste Management Policy", add:

(Ecology 86-07)

Section 4.2, revise first sentence:

"The EPA, DOE, and Ecology shall each designate an individual as a unit manager for each operable unit, each TSD group/unit, or other specific Agreement activity on which they participate."

Section 5.4, second paragraph, first sentence, revise:

"Since the Hanford Site was proposed for inclusion on the National Priorities List (NPL) (Federal Register, June 24, 1988) and was placed on the NPL on November 3, 1989 (Federal Register, October 4, 1989), the parties agree..."

Section 6.5 (New Section), Quality Assurance

The level of quality assurance and quality control (QA/QC) for the collection, preservation, transportation, and analysis of each sample which is required for implementation of this Agreement shall be dependent upon the data quality objectives for the sample. Such data quality objectives shall be specified in RCRA closure plans, the RCRA permit, and any other relevant plans that may be used to describe sampling and analyses at RCRA TSD units.

The QA/QC requirements shall range from those necessary for non-laboratory field screening activities to those necessary to support a comprehensive laboratory analysis that will be used in final decision-making. This range of QA/QC options is included in the "Data Quality Strategy for Hanford Site Characterization" (as listed in Appendix F). This document is subject to approval by EPA and Ecology.

Based upon the data quality objectives, the DOE shall comply with EPA guidance documents for QA/QC and sampling and analysis activities which are taken to implement the Agreement. Such guidance includes:

- o "Guidelines and Specifications for Preparing Quality Assurance Program Plans" (QAMS-004/80);
- o "Interim Guidance and Specifications for Preparing Quality Assurance Project Plans" (QAMS-005/80);
- o "Data Quality Objectives for Remedial Response Activities" (EPA/540/G-87/003 and 004); and
- o "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (EPA/SW-846).

In some instances, RCRA TSD units are included in operable units and are scheduled for investigation and closure as part of the operable unit remedial action. DOE shall follow the provisions of Section 7.8 for QA/QC for sampling and analysis activities at these land disposal units.

In regard to quality assurance requirements for construction of RCRA land disposal facilities, DOE shall comply with "Technical Guidance Document: Construction Quality Assurance for Land Disposal Facilities" (EPA/530-SW-86-031).

For analytical chemistry and radiological laboratories, the QA/QC plans must include the elements listed in "Guidance on Preparation of Laboratory Quality Assurance Plans" (as listed in Appendix F). DOE shall submit laboratory QA/QC plans to EPA and Ecology for review as secondary documents prior to use of that laboratory. In the event that DOE fails to demonstrate to the lead regulatory agency that data generated pursuant to this agreement was obtained in accordance with the QA/QC requirements of this section, including laboratory QA/QC plans, DOE shall repeat sampling or analysis as required by the lead regulatory agency. Such action by the lead regulatory agency shall not preclude any other action which may be taken pursuant to this Agreement. For other data, Ecology or EPA may request DOE to provide QA/QC documentation. Any such data that does not meet the QA/QC standards required by this section shall be clearly flagged and noted to indicate this fact.

Section 7.1, third paragraph, first sentence, revise:

"The 100, 200, 300, and 1100 Areas were identified as aggregate areas for inclusion of the Hanford Site on the CERCLA NPL."

Section 7.1, third paragraph, fourth sentence, revise:

"The four aggregate areas were proposed for inclusion on the NPL on June 24, 1988, and were placed on the NPL on November 3, 1989 (Federal Register, October 4, 1989)."

Section 7.3.1, insert after fourth sentence:

The four aggregate areas of the Hanford Site were officially placed on the NPL effective November 3, 1989 (Federal Register Vol. 54, No. 191, p. 41015).

Section 7.3.6, paragraph 1, add after first sentence:

A supplemental work plan to the RI/FS work plan will be prepared to cover the RI Phase II activities. This work plan will be placed in the Public Information Repositories.

Section 7.5, page 7-21, fifth bullet, add after "Chapter 70.98" RCW

Section 7.5, page 7-21, seventh bullet, change "70.105C RCW" to "70.105D RCW" and add:

and implementing regulations;

Model Toxics Control Act Cleanup Regulation--173-340 WAC

Section 7.7, Health Assessments, replace as follows:

The Agency for Toxic Substances and Disease Registry (ATSDR) is a part of the U.S. Public Health Service, which is under the U.S. Department of Health and Human Services. The ATSDR was created by Congress to help implement the health-related sections of laws that protect the public from hazardous waste and environmental spills of hazardous substances. The CERCLA requires ATSDR to conduct a health assessment within one year following proposal to the NPL for any site proposed after October 17, 1986.

The ATSDR health assessment is the result of the evaluation of data and information on the release of hazardous substances into the environment. Its purpose is to assess any current or future impacts on public health, to develop health advisories or other health recommendations, and to identify studies or actions needed to evaluate and mitigate or prevent adverse human health effects.

The ATSDR will prepare a preliminary health assessment for each of the four Hanford NPL areas (the 100, 200, 300, and 1100 Areas). Since the RI Phase I reports for these areas will not be available within one year following the proposal of Hanford to the NPL, these preliminary health assessments will be based upon the best available information.

As additional information becomes available, and as appropriate, ATSDR may, at its discretion, expand these preliminary health assessments into full health assessments adding to the overall characterization of the site, or prepare addenda to the health assessments addressing the public health impact of either individual or a combination of operable units at the site.

The health assessments, including any addenda, will become part of the administrative record.

## Section 7.8 (New Section), Quality Assurance

The level of quality assurance and quality control (QA/QC) for the collection, preservation, transportation, and analysis of each sample which is required for implementation of this Agreement shall be dependent upon the data quality objectives for the sample. Such data quality objectives shall be specified in RI/FS or RFI/CMS work plans or in other work plans that may be used to describe sampling and analyses at CERCLA or RCRA past-practice units.

The QA/QC requirements shall range from those necessary for non-laboratory field screening activities to those necessary to support a comprehensive laboratory analysis that will be used in final decision-making. This range of QA/QC options is included in the "Data Quality Strategy for Hanford Site Characterization" (as listed in Appendix F). This document is subject to approval by EPA and Ecology.

Based upon the data quality objectives, the DOE shall comply with EPA guidance documents for QA/QC and sampling and analysis activities which are taken to implement the Agreement. Such guidance includes:

- o "Guidelines and Specifications for Preparing Quality Assurance Program Plans" (QAMS-004/80);
- o "Interim Guidance and Specifications for Preparing Quality Assurance Project Plans" (QAMS-005/80); and
- o "Data Quality Objectives for Remedial Response Activities" (EPA/540/G-87/003 and 004).

In regard to quality assurance requirements for construction of land disposal facilities, DOE shall comply with "Technical Guidance Document: Construction Quality Assurance for Land Disposal Facilities" (EPA/530-SW-86-031).

For analytical chemistry and radiological laboratories, the QA/QC plans must include the elements listed in "Guidance on Preparation of Laboratory Quality Assurance Plans" (as listed in Appendix F). DOE shall submit laboratory QA/QC plans to EPA and Ecology for review as secondary documents prior to use of that laboratory. In the event that DOE fails to demonstrate to the lead regulatory agency that data generated pursuant to this agreement was obtained in accordance with the QA/QC requirements of this section, including laboratory QA/QC plans, DOE shall repeat sampling or analysis as required by the lead regulatory agency. Such action by the lead regulatory agency shall not preclude any other action which may be taken pursuant to this Agreement. For other data, Ecology or EPA may request DOE to provide QA/QC documentation. Any such data that does not meet the QA/QC standards required by this section shall be clearly flagged and noted to indicate this fact.

Section 8.2, first sentence, delete "monthly"

Section 8.2, add new second sentence:

For TSD groups and operable units, meetings shall be held monthly once work plans, closure plans, or Part B permit applications have been submitted to EPA and Ecology for review.

Section 8.3, first paragraph, change March 30 to March 31

Section 9.2.1, paragraph 3, correct third paragraph to include previously omitted phrase:

Upon receiving written comments from the lead regulatory agency, the DOE will update the document and/or respond to the comments (for closure plans, comments will be provided in the form of an NOD). The response will address all written comments and will include a schedule for obtaining additional information if required. The DOE may request an extension for a specified period for responding to the comments by providing a written request to the lead regulatory agency.

Section 9.2.1, paragraph 4, next to last sentence, revise:

"Within 21 days of completion of the dispute resolution, or within 30 days of receipt of the lead regulatory agency evaluation of the responses if there is no dispute..."

Section 9.2.1, paragraph 4, last sentence, delete "30-day"

Section 9.2.1, paragraph 5, last sentence, change "requested" to "notified DOE of the need for"

Section 9.3, add:

Minor changes to approved plans which do not qualify as minor field changes under Section 12.4 can be made through use of a change notice. Such plans include RI/FS work plans, remedial action work plans, RFI/CMS work plans, CMI work plans, and other work plans as described in Section 11.5. (Modifications to permits and closure plans will be done in accordance with applicable procedures specified in 173-303 WAC and 40 CFR 270.41.) The change notice will not be used to modify schedules contained within these supporting plans. Such schedule changes will be made in accordance with Section 12.0, Changes to Action Plan/Supporting Schedules.

Minor changes to approved plans include specific additions, deletions, or modifications to its scope and/or requirements which do not affect the overall intent of the plan or its schedule. The lead regulatory agency will evaluate the need to revise the plan. If the revision is determined to be necessary, the lead regulatory agency will decide whether it can be accomplished through use of the change notice, or if a full revision to the plan in accordance with this section is required.

The change notice will be prepared by the appropriate DOE unit manager and approved by the assigned unit manager from the lead regulatory agency. The approved change notice will be distributed as

part of the next issuance of the applicable unit managers' meeting minutes. For RI/FS and RFI/CMS work plans, the change notice will thereby become part of the Administrative Record. The change notice form shall, as a minimum, include the following:

- o Number and title of document affected
- o Date document last issued
- o Date of this change notice
- o Change notice number
- o Description of change
- o Justification and impact of change (to include affect on completed or ongoing activities)
- o Signature blocks for the DOE and lead regulatory agency unit managers

Section 9.4, revise address for administrative record:

- o U.S. Department of Energy - Richland Operations Office  
Administrative Record Center  
345 Hills Street  
(off George Washington Way)  
Richland, Washington 99352

Section 9.4, Table 9-3, Administrative Record Documents, add to list of "Factual Information/Data (CERCLA):

Supplemental work plan  
Health assessment  
Work plan change notice

Section 9.4 Table 9-3 Administrative Record Documents, add to list of "Factual Information/Data (RCRA):

Work plan change notice

Section 9.4, page 9-10, correct next to last bullet

"form" should be "from"

## Section 9.6 (new section), Data Reporting Requirements

The unit managers will provide a list of the data collected at each operable unit on behalf of their respective parties at the monthly unit managers meetings. This will allow each party to determine its data needs and to establish the format, quality, and timing for submitting the data. This process will be followed until such time that electronic transfer of data from DOE to the regulators is established. At that time, Appendix F will be expanded to include a specific procedure for submittal of data to the regulatory agencies. The document to describe these procedures is the "Data Reporting Requirements for the Hanford Site."

The DOE shall make available to EPA and Ecology all validated laboratory analytical data collected pursuant to this Agreement within fifteen days of validation. Validation procedures (Data Validation Guidelines for Contract Laboratory Program Organic Analyses and Data Validation Guidelines for Contract Laboratory Program Inorganic Analyses) are being developed and shall be included in the Sample Management Administrative Manual. This requirement will be met with data entry into HEIS as soon as it becomes operational (see Section 9.7) or other environmental data bases currently in use. EPA and Ecology shall have direct "read-only" access to these data bases from remote locations.

The validation process shall not exceed twenty-one days after receipt of laboratory data. After electronic access to such data has been made available to the regulatory agencies, Ecology and EPA shall be notified of data availability via electronic mail or facsimile transmission. Notification shall occur within one week of data entry, and shall include the following information:

- date(s) of collection
- unit(s) where data collected
- type of data, e.g., ground water
- list of sample parameters, e.g., target compound list, Appendix IX, or discrete parameters

### 9.6.1 Non-Electronic Data Reporting

For data not available in electronic format, DOE shall meet the data reporting requirements by providing a summary list of new data at the unit managers meetings, or as otherwise requested by EPA or Ecology. This list will include, at a minimum, the information described in the preceding paragraph addressing notification. The lead regulatory agency shall determine on a case-by-case basis if data warrants a more detailed presentation or analysis. This reporting method shall also be used for field screening data. Field screening data shall be accompanied by maps or sketches with sufficient detail to determine where the data was obtained.

The information shall be submitted to the requesting party within ten days of receipt of EPA's or Ecology's written request, or as otherwise agreed to by the parties involved. In addition, other



reporting requirements may be specifically required by the RCRA permit, RCRA closure plans or work plans.

#### 9.6.2 Data Analyses Schedules

The level of quality assurance for each sample shall meet the requirements of Article XXX and shall depend on the specified data quality objectives as stated in the specific sampling and analysis plan. Laboratory analysis and quality assurance documentation, excluding validation, shall be limited to the following schedule:

- Transuranic and hot cell analyses - 100 days annual average, but not to exceed 140 days
- Single-shell tank analyses - 180 days
- Low-level and mixed waste (up to 100 mr/hour) analyses - 75 days annual average, but not to exceed 90 days
- Nonradioactive waste analyses - 50 days

All schedules in this section are effective beginning with the date of individual sampling activities. For unique circumstances, a schedule other than that specified in this section can be agreed to by DOE and the lead regulatory agency.

The DOE shall make available to the regulatory agencies non-laboratory data collected pursuant to this Agreement (e.g., surface geophysical data) within thirty days after sampling has been completed.

DOE will integrate all of the data discussed in this section into the appropriate RCRA or CERCLA reports which are described in Section 6.0 and 7.0 in accordance with approved permits, closure plans, or work plans.

#### 9.6.3 Electronic Data Reporting Requirements

Computer-based information systems shall be defined as "Operational" when data may be entered and the system is capable of generating reports. Remote access to validated data in the following computer-based information systems supporting site investigation, remediation and closure action activities; will be provided to EPA, Ecology and their respective contractor staff in accordance with the following schedule:

1. Hanford Groundwater Database (HGWDB) - June 8, 1990
2. Hanford Environmental Information System (HEIS) - October 15, 1990 [HEIS is partially operational as defined in Section 9.6.4. HEIS does not include remote access to the Geographic Information System (GIS).]
3. Other databases indicated in Section 9.6.4 will be provided remote access in accordance with a schedule agreed to by the parties.

The term "remote access" is defined as emulating all read-only capabilities of the information system accessed, including data

transfer. The GIS may be accessed by EPA, Ecology and their respective contractor staff in a DOE facility.

#### 9.6.4 Hanford Environmental Databases

There are a number of technical computer-based information systems that are currently in use or will be used in the future to support site investigation, remediation and closure action activities. Depending on the system selected, information may be provided by remote access or by hard copy for work plan development and site investigation. The information shall be provided by DOE within 10 days of receipt of written requests by EPA and Ecology or as otherwise agreed to by the parties involved. Those systems currently identified include:

- o Crib Waste Management (CWM)
- o Hanford Environmental Information System (HEIS) \*
- o Hanford Groundwater Database (HGWDB)
- o Hanford Meteorological Data Collection System (HMS)
- o Hazardous Waste Tracking Database (HWTB) \*
- o Laboratory Information Management System (LIMS) \*
- o Project and Data Management System
- o Richland Solid Waste Information Management System (RSWIMS)
- o Waste Information Data System (WIDS)

The above list may be modified during the course of the investigative process and remedial actions conducted at Hanford.

\* Information system in development

HEIS is being developed as part of a computer-based system necessary to support site investigation, remediation, and closure activities. The HEIS will serve to facilitate graphic interpretation and presentation of data. It will also provide a means of interactive access to selected data sets extracted from other databases that are relevant to the activities conducted pursuant to this agreement. The HEIS is scheduled to be partially operational in October 1990 and will access the HGWDB. HEIS will also include atmospheric, biotic, geophysics, geologic, and soil gas data.

Section 10.2, correct telephone number for DOE:

(509) 376-8583

Section 10.2, revise Spokane information repository location:

- o Crosby Library  
Gonzaga University  
E. 502 Boone  
Spokane, Washington 99258  
(509) 328-4220

Section 10.3, paragraph 2, last sentence, revise as follows:

In some instances, this newsletter may be used in conjunction with a public notice and/or advertisement (newspaper or radio)...

Section 10.5.3, replace last two sentences with:

The quarterly public information meetings will be scheduled, to the extent practicable, to coincide with public comment periods or other significant events.

Section 10.6, second bullet, RI/FS Work Plan (CERCLA) or RFI/CMS Work Plan (RCRA), add last sentence:

The public notice published in the newspaper announcing the availability of work plans shall also indicate the location and availability of the Administrative Record file.

Section 10.9, first paragraph, revise first sentence:

The Model Toxics Control Act, Chapter 70.105D RCW and 173-321 WAC, provide for public participation grants to persons...

Section 10.9, first paragraph, delete third sentence:

Ecology anticipates adopting emergency rules to implement this program in July of 1989.

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Section 11.6 (new section), Supporting Technical Plans and Procedures

In addition to the requirements as specified in this Agreement, supporting technical plans and procedures may be developed by DOE. They will be reviewed for approval by EPA and Ecology as primary documents or reviewed as secondary documents as determined by EPA and Ecology. The DOE may submit such plans or procedures at any time, without request of the regulatory agencies. The EPA or Ecology may also request that specific plans or procedures be developed or modified by DOE, consistent with Article XXIX of the Agreement. These technical plans and procedures shall pertain to specific compliance and cleanup activities conducted pursuant to this Agreement and shall provide a detailed description of how certain requirements will be implemented at the Hanford Site. DOE shall comply with the most recent approved versions of these technical plans and procedures and those secondary documents which are in effect.

Appendix F contains a listing of current supporting technical plans and procedures and their respective status. Appendix F will be updated annually in conjunction with the annual update to the Work Schedule.

Section 12.2, add to third bullet:

It is not the intent of the parties to revise target dates because work is slightly behind or ahead of schedule. Such schedule deviations will be reflected through the reporting of work schedule status. The use of the change process for revising target dates is for use by the parties to delete, add, or significantly accelerate or defer a target date.

Section 12.5, second paragraph, insert new first sentence:

Appendices B, C, E, and F will be reissued annually in conjunction with the annual update of Appendix D. Appendices may be updated...

Appendix A, add following definitions:

**Validated Data:** Data that DOE has determined meets criteria contained in the "Data Validation Guidelines for Contract Laboratory Program Organic Analyses" and "Data Validation guidelines for Contract Laboratory Program Inorganic Analyses" that are contained in the Sample Management Administrative Manual.

**Verified Data:** Data that has been checked for accuracy and consistency by DOE following a transfer action (e.g., from manual log to computer or from distributed data base to centralized data repository).

Appendix F (new appendix), Supporting Technical Plans and Procedures:

APPENDIX F

Supporting Technical Plans and Procedures

<u>Document</u>	<u>Status</u>
Strategy for Handling and Disposing of Purgewater at the Hanford Site, Washington	In review
Data Quality Strategy for Hanford Site Characterization	In review
Environmental Investigation and Site Characterization Manual (contains specific procedures governing Site investigation activities)	In review
Data Reporting Requirements for the Hanford Site	To be developed
Guidance on Preparation of Laboratory Quality Assurance Plans	To be developed
Data Validation Guidelines for Contract Laboratory Program Organic Analyses	In review
Data Validation Guidelines for Contract Laboratory Program Inorganic Analyses	In review

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## PROPOSED LAND DISPOSAL RESTRICTION PROVISIONS

Page 1, Executive Summary, Treatment, Storage, and Disposal, after second sentence add:

In 1984, Congress amended RCRA, imposing, among other things, additional restrictions on hazardous waste storage and disposal activities. These restrictions have been referred to as the Land Disposal Restrictions (LDR). Some of the mixed wastes which are stored at Hanford are subject to LDR and cannot be land disposed until the wastes are treated in accordance with LDR regulations, or a variance is granted under 40 CFR 268. These wastes are stored in underground tanks or in other mixed waste units.

At present, DOE does not have the capability to treat all of the LDR mixed wastes at Hanford in accordance with LDR, and until such treatment occurs, disposal is prohibited. The mixed waste treatment systems which are currently available and treatment systems which are planned for the future must satisfy prescribed LDR treatment requirements. Until treatment systems capable of treating the mixed waste to meet the LDR treatment standards become available for Hanford wastes, storage of existing wastes and wastes which will be generated will continue. However, such storage will be in accordance with an approved plan for the management of LDR mixed waste.

In addition to restrictions on land disposal, these LDR requirements also include specific conditions for storage of LDR wastes. The Department of Energy will submit schedules to develop and construct waste treatment systems necessary to achieve compliance with LDR storage requirements, which shall become effective upon approval by EPA (or Ecology upon authorization for LDR pursuant to Section 3006 of RCRA).

Page 4, revise bullet 3:

...including requirements covering permitting, interim status, land disposal restrictions, closure, and post-closure care;

Page 6-1, Section 6.1, Introduction, insert new last paragraph:

The RCRA land disposal restrictions (LDR) require that established treatment requirements be met prior to land disposal of hazardous wastes. While treatment capacity generally exists for the nonradioactive hazardous wastes which are subject to LDR, treatment is currently not available for the mixed wastes subject to LDR which require storage at the Hanford Site.

In accordance with Milestone M-26-00, DOE will submit the "Hanford Land Disposal Restrictions Plan for Mixed Wastes," (LDR Plan) to EPA and Ecology. This plan will describe a process for managing mixed wastes subject to LDR at the Hanford Site and will identify actions which will be taken by DOE to achieve full compliance with LDR requirements.

These actions will be taken in accordance with approved schedules specified in the LDR Plan and in the Work Schedule (Appendix D). The DOE will submit annual reports which shall update the LDR Plan and the prior annual report, including plans and schedules. The annual report will also describe activities taken to achieve compliance and describe the activities to be taken in the next year toward achieving full compliance. The LDR Plan and annual reports are primary documents, subject to review and approval by EPA, in consultation with Ecology. EPA also has approval authority for schedules in the LDR Plan and annual reports. Changes to approved final schedules must be made in accordance with the Change Control System described in Section 12.0. When Ecology receives authorization from EPA to implement the LDR provisions of RCRA pursuant to Section 3006 of RCRA, Ecology will review and approve the annual reports, plans, and schedules, in consultation with EPA, and will otherwise administer the LDR requirements.

Page 11-1, add bullet:

- o Land disposal restriction requirements

Appendix A, add definition for land disposal restricted waste:

Land Disposal Restriction Waste (LDR): RCRA hazardous wastes, subject to Section 3004(d) through (m) of RCRA and 40 CFR 268.

## PROPOSED NEW MILESTONES TO ADDRESS LDR

M-20-47	Submit Part B permit application for 200 East Area LERF to EPA and Ecology	June 1991
M-26-00	Submit "Hanford Land Disposal Restrictions Plan for Mixed Wastes" (LDR Plan) in accordance with "Requirements for the Hanford LDR Plan" issued by EPA and Ecology, dated April 10, 1990	October 1990

Land disposal restriction (LDR) requirements include limitations on storage of specified hazardous wastes (including mixed wastes). In accordance with approved plans and schedules, DOE shall develop and implement treatment technologies necessary to achieve full compliance with LDR requirements for mixed wastes at the Hanford Site. LDR plans and schedules shall be developed with consideration of other Action Plan milestones and will not become effective until approved by EPA (or Ecology upon authorization to administer LDR pursuant to Section 3006 of RCRA). Disposal of LDR wastes at any time is prohibited except in accordance with applicable LDR requirements. DOE shall comply with all applicable LDR requirements for nonradioactive wastes at all times. The LDR Plan will include, but not be limited to the following:

- a. Waste Characterization Plan
- b. Storage Report
- c. Treatment Report
- d. Treatment Plan
- e. Waste Minimization Plan
- f. A schedule, depicting the events necessary to achieve full compliance with LDR requirements
- g. A process for establishing interim milestones

M-26-01	Submit an Annual Hanford Land Disposal Restrictions Report in accordance with the LDR Plan to cover the period from October 1 through September 30	Annually Beginning October 1991
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The reports shall include a description of activities taken in accordance with the LDR Plan and prior annual reports to achieve full compliance with LDR requirements. The reports shall update all information contained in the LDR Plan and the prior annual report, including plans and schedules.



M-26-02	Establish interim milestones for LDR compliance	Annually Beginning October 1990
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Schedules for achieving compliance with LDR requirements at TSD mixed waste units (or as otherwise approved) shall be developed in accordance with the LDR Plan and the annual reports. Such schedules will be subject to review and approval by EPA (or Ecology upon authorization to administer LDR pursuant to Section 3006 of RCRA).

M-26-03	Cease discharge of 242-A Evaporator process condensate effluent to LERF units	December 1994
---------	---	---------------

DOE may discharge process condensate effluent from the 242-A Evaporator to Liquid Effluent Retention Facility (LERF) units from December 1990 through December 1994 if (1) the placement of such effluent into LERF is necessary for completion of milestones required by the Agreement; (2) interim status authorization includes these units or a RCRA permit covering these units has been issued; (3) the units satisfy the requirements of 40 CFR Part 264, Subpart K, or 40 CFR Part 265, Subpart K; (4) the units maintain a floating cover which minimizes evaporation; (5) the units comply with all applicable hazardous waste requirements; and (6) prior certification of compliance with 40 CFR 268.4(a)(3) is submitted in accordance with 40 CFR 268.4(a)(4). Discharges of effluent containing hazardous waste subject to the land disposal restrictions other than process condensate from the evaporator to LERF is prohibited.

M-26-04	Remove all hazardous waste residues from the 242-A Evaporator LERF units	June 1995
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Remove all hazardous waste residues (including any liquid waste) that do not meet LDR treatment standards and applicable prohibition levels imposed by regulation or statute and residues from wastes prohibited from land disposal where no treatment standards have been established and no prohibition levels apply, or which are not delisted pursuant to 40 CFR 260.22 and WAC 173-303-072.



Westinghouse  
Hanford Company

# BECKER DRILL/DRILL CUTTINGS CONTAINMENT SYSTEM

D. J. Moak  
May 16, 1990

the best  
DOE site

WE'RE MAKING SURE...




Westinghouse  
Hanford Company

## CHRONOLOGY OF EVENTS FOR TEST BORINGS

- o Field testing began April 6, 1990.
- o Vertical test boring completed to 103-feet on April 11, 1990, using dual wall and triple wall system.
- o A -35 degree angle boring drilled with dual wall pipe to 100-feet on April 13, 1990, and April 16, 1990.
- o Geological samples have been taken from the mini-cyclone, split spoon and the 55-gallon drums for grain size analysis, comparisons, and oil and grease contamination.

WE'RE MAKING SURE...



the best  
DOE site



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## ASSESSMENT FROM TEST BORINGS

- o Initial indications are that the drill cuttings containment system is effective; HEPA filters and unit routinely tested by DOP testing.
- o Dual wall system drilled at approximately one-foot/minute.
- o Becker method releases diesel hammer aerosol emissions around the site at each stroke of the hammer.
- o Many potential (and actual) hydraulic and particulate leaks.
- o System requires a large work space.
- o Drill pipe and sampling handling tools should be upgraded if routinely used at Hanford.

the best  
DOE site

WE'RE MAKING SURE...




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## ASSESSMENT FROM TEST BORINGS CONT..

- o Sampling tools may need upgraded to maximize sample recovery and efficiency.
- o Lack of flexibility in hole design/casing size.
- o Angle drilling limitation of 45 degrees.
- o Waste generation is greater than other methods (i.e., decon, rinse and cuttings).
- o Approval given to drill U-17 ground water well.

WE'RE MAKING SURE ...



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DOE site



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**CHRONOLOGY OF EVENTS FOR**  
**U-17 OPERATIONAL GROUND WATER WELL**

**299-W19-30**

- o April 25, 1990                      Completed decon and rig-up on site
- o April 25, 1990                      Drilled with triple wall system to 8-feet.
- o April 26, 1990                      Drilled with triple wall system 8 - 59-feet and took two split spoon samples. The modification to the diesel hammer exhaust is approximately 90% effective.
- o April 27, 1990                      Drilled with triple wall system 59 - 85-feet; ran gross gamma geophysical log and took two split spoon samples.

the best  
DOE site

WE'RE MAKING SURE...



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**CHRONOLOGY OF EVENTS FOR**  
**U-17 OPERATIONAL GROUND WATER WELL**  
**299-W19-30**

- o April 30, 1990      Drilled with dual wall pipe 85 -  
150-feet and took two split spoon  
samples at approximately 1 1/2 hours  
for each sample. Working hours 8:00  
a.m. - 3:00 p.m.
  
- o May 1, 1990      Drilled with dual wall pipe 150 -  
189-feet and took two split spoon  
samples. 140# ASTM hydraulic  
hammer took 2 1/2 hours to drive  
5-inch samples. At 186-feet, 700  
blows for 6-inches of sample then  
1,057 blows for next 6-inches.

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**CHRONOLOGY OF EVENTS FOR**  
**U-17 OPERATIONAL GROUND WATER WELL**  
**299-W19-30**

- o May 2, 1990      Drilled with dual wall pipe 189 -  
239-feet and took two split spoon  
samples. Top of water approximately  
236-feet.
  
- o May 3, 1990      Drilled with dual wall pipe 239 -  
254-feet TD. Drilled from 236 -  
249-feet with minimal water  
discharge from borehole. Water  
contained in 55-gallon drums.  
Cannot sample wet material through  
sample cyclone. From 249 - 254-feet  
discharge water and cuttings directed  
to drill cuttings containment system.  
This, plus hole cleaning filled drill

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**CHRONOLOGY OF EVENTS FOR**  
**U-17 OPERATIONAL GROUND WATER WELL**  
**299-W19-30**

- o May 3, 1990 cont., cuttings containment system approximately half full (200 + - gallon).
- o May 4, 7, 8, 9, 10, 11, 14, 1990 Conducted straightness test, ran 20-feet of 4-inch 10 slot screen, 50# 20-40 sand and got sand hitched. Contractor fishing for screen for six days. Recovered approximately 2 1/2-feet of screen.
- o May 15, 1990 Began tripping 9 x 6 pipe to retrieve screen and redrill hole.

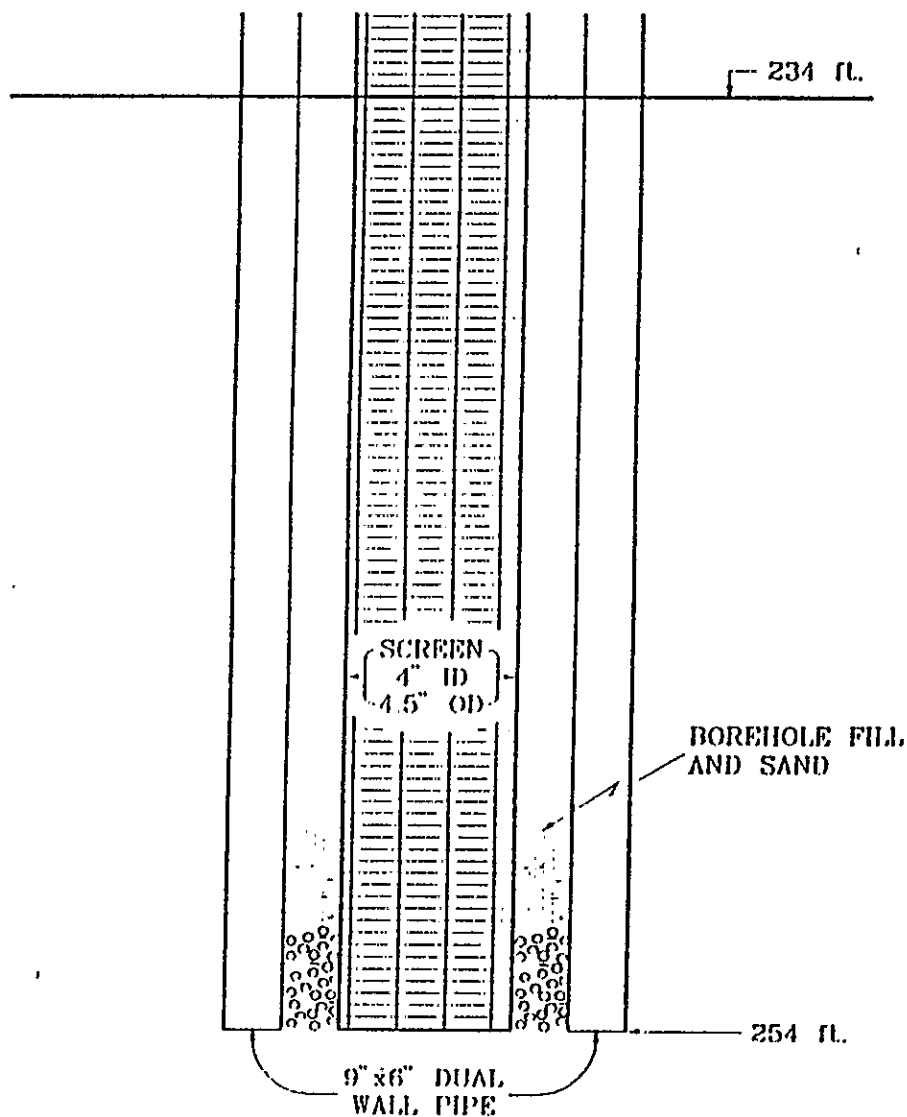
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299--W19-30



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ACTUAL DIMENSIONS:

5 7/8" ID PIPE AT CONNECTIONS

-4 1/2" OD SCREEN

1 3/8" x 2" = 11/16" ANNULUS IN WHICH TO PLACE SAND

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## PRELIMINARY ASSESSMENT FROM U-17 WELL

- o Drill cuttings containment system unit functions very well.
- o Becker drill has some potential application at Hanford.
- o Ground water well completion is uncertain.
- o Additional drilling with the Becker drill at this time is on hold.
- o Drilling is labor intensive but faster than other methods.
- o Drilling costs appear to be "a wash" compared to cable tool.
- o Sampling through the drill pipe is effective.

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**STATUS OF SOIL AND GROUNDWATER  
BACKGROUND &  
REFERENCE CRITERIA ISSUES**

- **OBJECTIVES**
- **IMPACT**
- **ACTIONS**
- **STATUS**

9 0 1 1 3 3 1 1 3 1 5

## **OBJECTIVES**

**DEVELOPMENT OF A TECHNICALLY DEFENSIBLE AND  
INTERNALLY CONSISTENT BASIS FOR WASTE MANAGEMENT**

- **IDENTIFICATION OF CONTAMINATION AT HWMU'S**
- **DETERMINATION OF CLEANUP LEVELS**
- **STRATEGY DEVELOPMENT FOR REMEDIATION, CLOSURE,  
ISOLATION**
- **EFFECTIVE ALLOCATION OF RESOURCES**

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## **REFERENCE CRITERIA**

- **DETECTION LIMITS (LOD, MDL, IDL, LOQ, MQL, ETC.)**
- **BACKGROUND (NATURAL, LOCAL)**
- **NUMERICAL (LISTED) VALUES; E.G., DRINKING WATER STANDARDS**
- **WASTE DESIGNATION LIMITS**
- **HEALTH-BASED CRITERIA**
  - **CARCINOGENICITY THRESHOLDS**
  - **TOXICITY THRESHOLDS**
- **ENVIRONMENTAL CRITERIA**
  - **ORGANISM TOXICITY**
  - **REPRODUCTION/PROPAGATION EFFECTS**
- **OTHER ACL'S**
  - **MODEL-BASED VALUES**
  - **TECHNICALLY ACHIEVABLE LEVELS**
  - **TECHNICALLY PRACTICAL LEVELS**
  - **RISK ANALYSIS PARAMETERS**

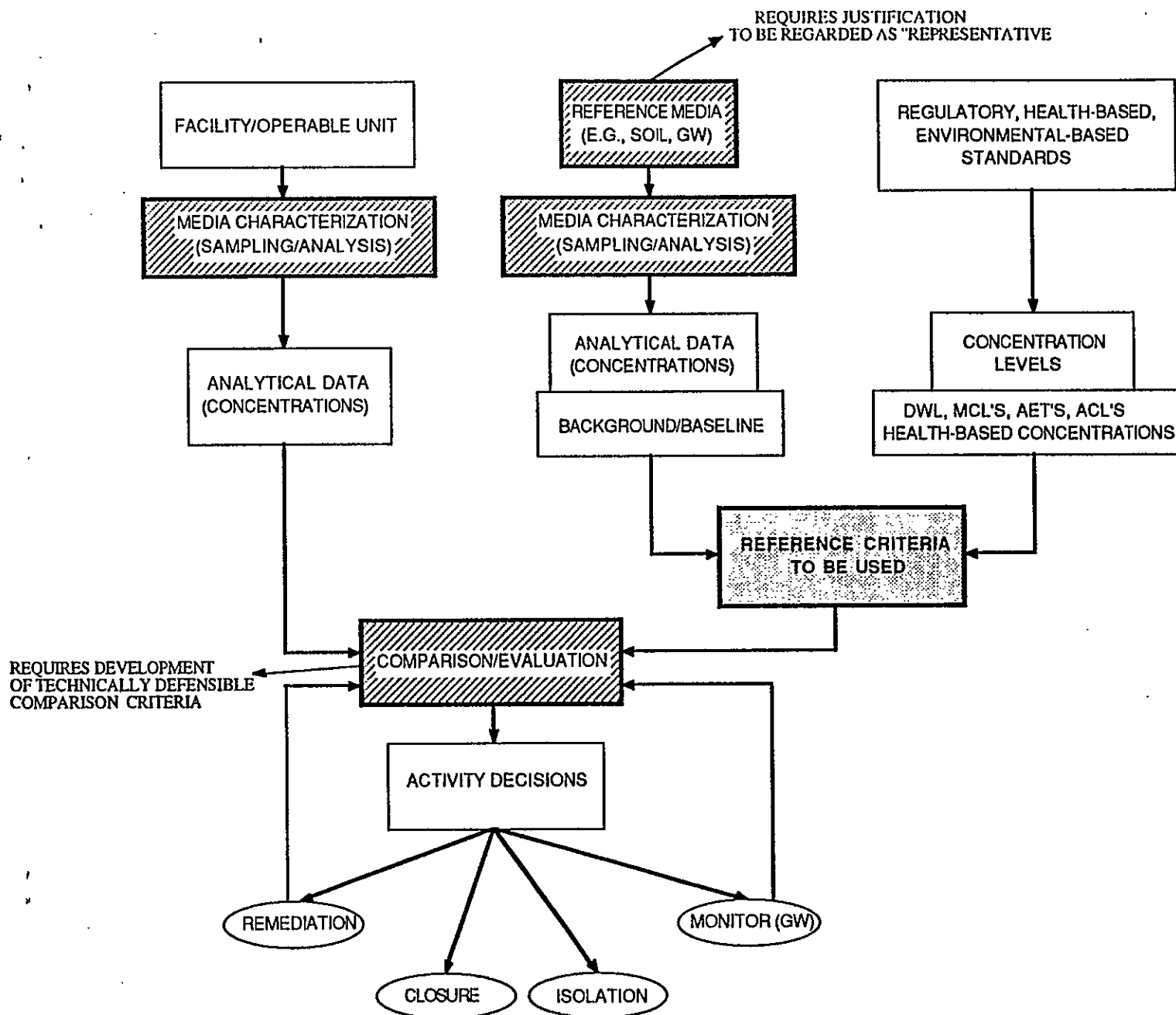
## **ACHIEVING THESE OBJECTIVES INVOLVES:**

- IDENTIFICATION OF APPROPRIATE REFERENCE CRITERIA**
- DEFINITION, CHARACTERIZATION, COMPILATION OF REFERENCE CRITERIA**
- IDENTIFICATION AND RESOLUTION OF REFERENCE CRITERIA ISSUES THAT IMPACT WM STRATEGIES AND ACTIVITIES: (E.G., SAMPLING AND ANALYSIS)**
- STRATEGY FOR THE EVALUATION OF CONTAMINATION AND CLEANUP LEVELS**
- IMPLEMENTATION OF SITE-WIDE STRATEGY**



## **IMPACT**

- **RESPONSIBLE PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT**
- **AVOID ERRORS IN STRATEGY & ACTIVITIES**
- **EFFECTIVE ALLOCATION AND PRIORITIZATION OF RESOURCES**
- **PROVIDE A TECHNICAL BASIS FOR ASSOCIATED ACTIVITIES (E.G., PA, RESEARCH)**



## **ACTIONS**

### **TASK TEAMS:**

- **PREPARATION OF PLAN FOR DEVELOPMENT OF A SITE-WIDE STRATEGY FOR THE IDENTIFICATION AND USE OF REFERENCE CRITERIA**
- **INITIATE DEVELOPMENT OF STRATEGY**
- **COMPILATION AND SUMMARY OF EXISTING DATA AND PERTINENT INFORMATION ON SOIL AND GROUNDWATER BACKGROUND**
- **IDENTIFY AND ADDRESS REFERENCE CRITERIA ISSUES PERTAINING TO MEDIA OTHER THAN SOIL AND GROUNDWATER (E.G., CONCRETE, SEDIMENT, BIOTA, ETC.)**
- **DEVELOP (INTERIM) MEASURES THAT ENABLE ONGOING WORK TO BE PERFORMED TO MEET TPA MILESTONES**

## STATUS

### REFERENCE CRITERIA STRATEGY PLANNING TEAM:

- **FIRST DRAFT OF "PLAN FOR DEVELOPMENT OF A STRATEGY FOR THE USE BACKGROUND AND ENVIRONMENTAL REFERENCE CRITERIA AT THE HANFORD SITE" SUBMITTED FOR TEAM REVIEW, APRIL 1990; REVISION IN PROGRESS; ANTICIPATED COMPLETION FOR WHC/DOE REVIEW, JUNE 1990**
- **SITE-WIDE REVIEW OF MODEL TOXICS CONTROL ACT, PROPOSED CLEANUP STANDARDS; WHC / DOE-RL POSITION; SUBMITTED TO ECOLOGY 4-13-90**
- **COMPILATION OF REFERENCE CRITERIA MATRIX**
- **COMPILATION OF REFERENCE CRITERIA GLOSSARY**

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## **STATUS (con't)**

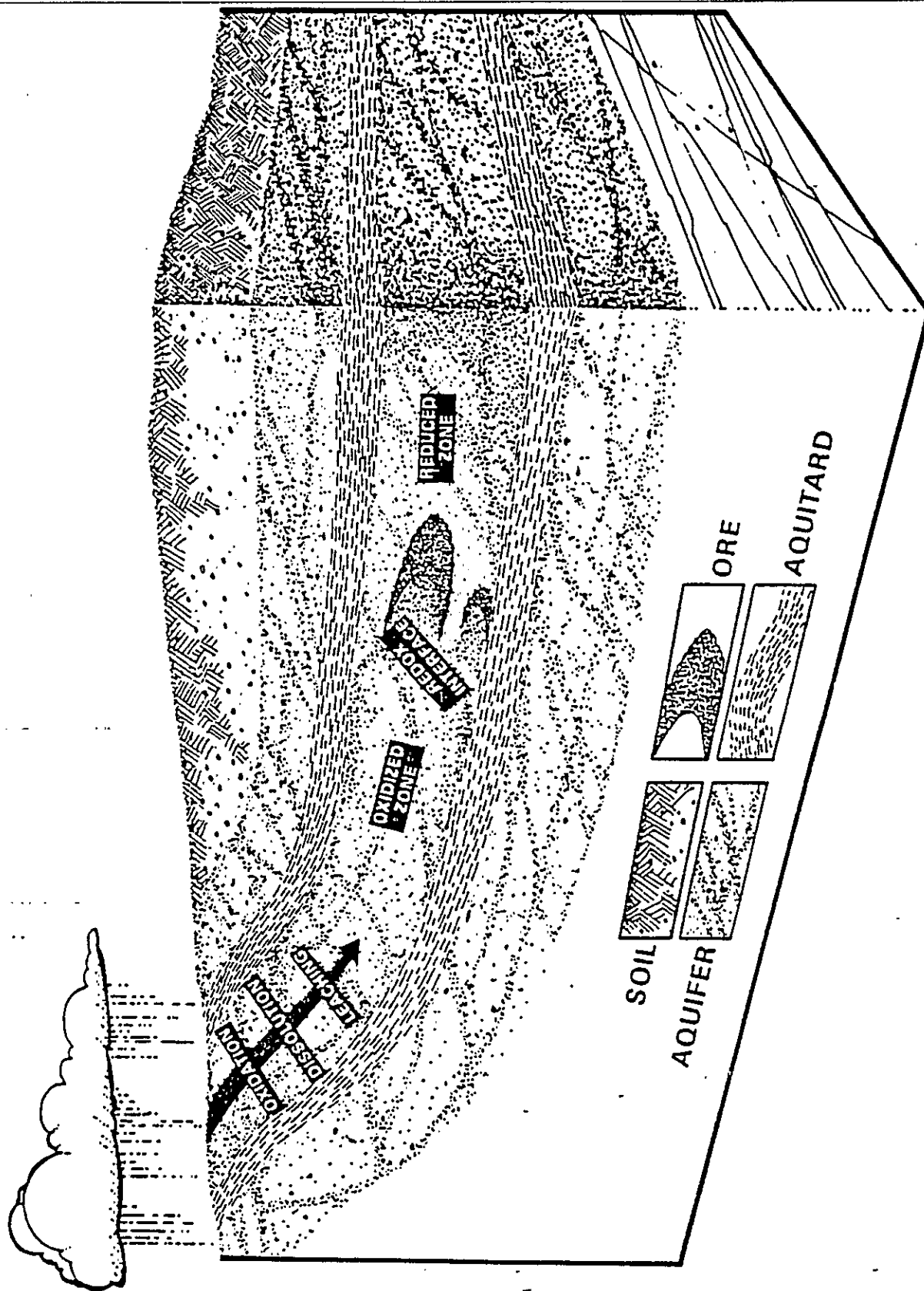
### **BACKGROUND DATA SUMMARY TEAM**

- **REVIEW OF EXISTING GROUND WATER DATA (PNL, EPA, BWIP)**
- **CONCEPTUAL MODEL FOR GROUNDWATER BACKGROUND COMPOSITION**
- **CONCEPTUAL MODEL FOR SOIL BACKGROUND COMPOSITION**
- **SAMPLING/ANALYSIS PLAN FOR SITE-WIDE SOIL BACKGROUND STUDY**
- **SUMMARY AND EVALUATION OF APPROPRIATE HEALTH AND ENVIRONMENTAL REFERENCE CRITERIA**

## **CONCEPTUAL MODEL FOR GROUNDWATER BACKGROUND**

- **BACKGROUND POPULATION(S)**
- **PA/GEOCHEMICAL MODELING (PURGEWATER MODEL)**
- **IDENTIFY INFORMATION NEEDED TO CONSTRAIN RANGE OF COMPOSITIONS;  
(I.E., LATERAL AND VERTICAL VARIATIONS)**
  - **WELL LOCATIONS**
  - **SAMPLING DEPTHS**
  - **APPROPRIATE SAMPLES**
  - **MINERALOGICAL MAKEUP OF AQUIFER**
  - **OTHER AQUIFER PARAMETERS (E.G., Eh)**
  - **AQUIFER INTERCOMMUNICATION AND AQUIFER/RECHARGE COMMUNICATION (E.G., RIVER)**

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## **CONCEPTUAL MODEL FOR SOIL BACKGROUND COMPOSITION**

- ORIGIN; DEPOSITIONAL ENVIRONMENT; SOURCE
- SIMILARITY OF FINE-GRAINED SIZE FRACTIONS
- LEACHATE COMPOSITIONS (SIMILAR THOUGH NOT IDENTICAL; REFLECTS PROPORTION DIFFERENCES)
- ANALYSIS OF EXISTING DATA; EVALUATION OF LATERAL AND VERTICAL HETEROGENEITIES



## **SUMMARY AND EVALUATION OF HEALTH AND ENVIRONMENTAL REFERENCE CRITERIA**

- **COMPILATION OF RFD'S**
- **EXPOSURE MODELS, TOXIC THRESHOLD CALCULATIONS**
- **EVALUATION OF ENVIRONMENTAL CRITERIA (EXPOSURE  
PATHWAYS, FOOD CHAIN, ORGANISM SENSITIVITY)**
- **COMPILATION OF CARCINOGENICITY SLOPE FACTORS;  
RISK FACTOR CALCULATIONS**

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## **STATUS (con't)**

### **COMPARISON CRITERIA TEAM**

- CONTAMINATION MODELS
- STATISTICAL CRITERIA FOR SAMPLING AND DATA EVALUATION
- LOGIC AND ACTIVITY SEQUENCES (E.G., SCREENING METHODS, USE OF INDICATOR CONSTITUENTS)
- TEST CASES
- OTHER DATA INTERPRETATION MODELS

### **INTERIM MEASURES TEAM**

- REMEDIAL ACTION MEMORANDUM (RAM) BINDER;  
ENVIRONMENTAL COMPLIANCE MANUAL
  - DEFINITIONS (E.G., MDL)
  - DETERMINATION OF LABORATORY QC
  - USE OF QC IN DATA INTERPRETATION
  - JUSTIFICATION FOR HANFORD SITE BACKGROUND (SOIL)
  - USE AND SELECTION OF INDICATOR CONSTITUENTS
  - WIPE SAMPLE METHODOLOGY/DATA INTERPRETATION
  - CONCRETE SAMPLING AND ANALYSIS
  - JUSTIFICATION FOR INORGANIC CONCENTRATION PROFILES IN VADOSE ZONE

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## STATUS (con't)

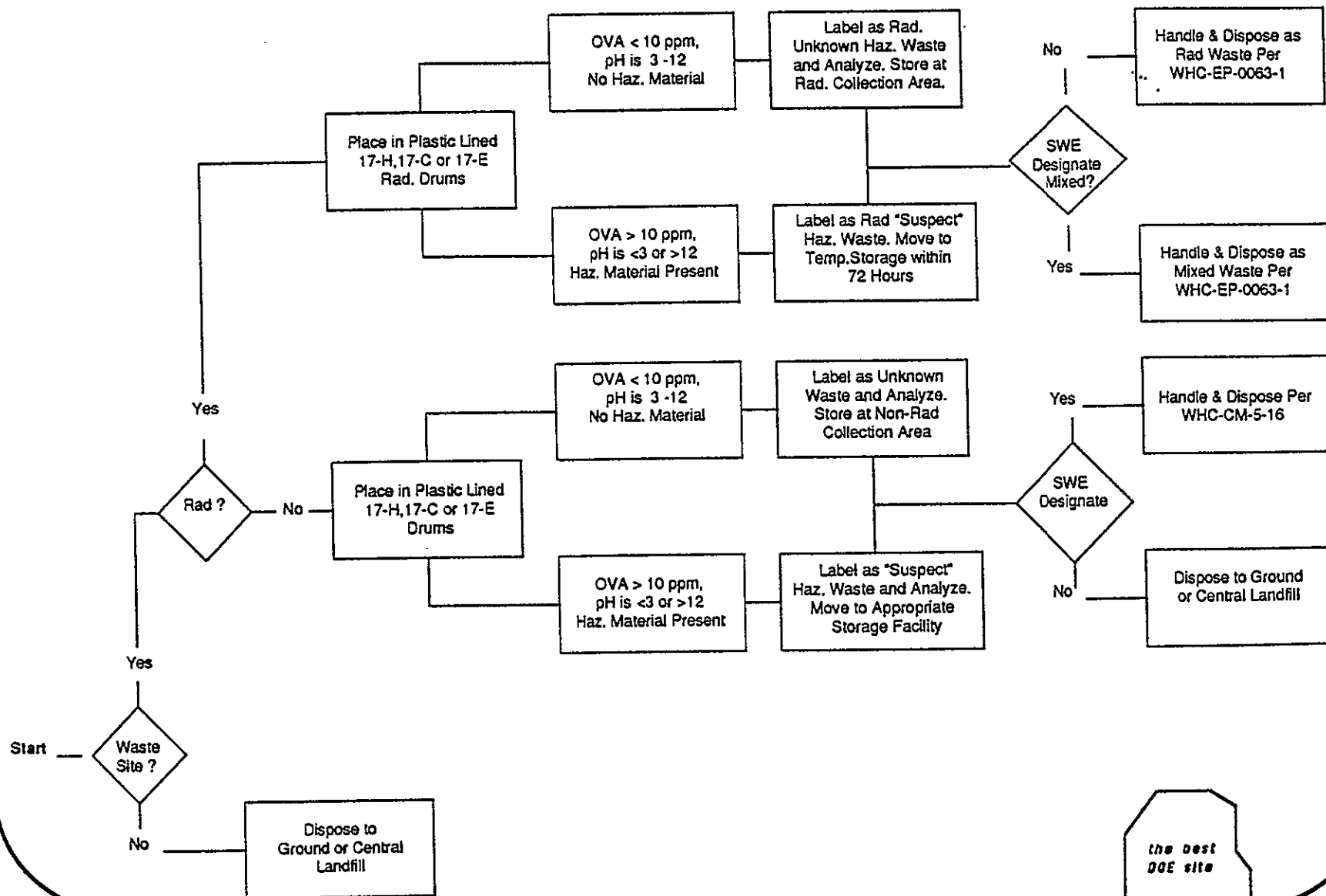
### OTHER MEDIA TEAM

- CONCRETE SAMPLING AND ANALYSIS ISSUES
- WIPE SAMPLES
- SEDIMENT
- BIOTA



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## CURRENT PROCEDURE



Attachment #12

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## DISADVANTAGES OF CURRENT PROCEDURE

- **REQUIRES A CONSERVATIVE APPROACH WHICH IS NOT AN EFFICIENT USE OF SCARCE FUNDS**
- **DOES NOT CLEARLY DEFINE WASTE SITE**
- **DOES NOT ALLOW FIELD DESIGNATION  
I.E., DUMP/DRUM DECISION REAL TIME AT  
WASTE SITE**
- **REQUIRES REMOVAL OF DESIGNATED WASTE WITHIN  
90 DAYS AT CERCLA SITES**
- **DOES NOT EFFECTIVELY MINIMIZE WASTE AND  
REDUCE POTENTIAL EXPOSURES**
- **DOES NOT TAKE ADVANTAGE OF RECENT REGION 10  
EPA GUIDANCE**

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## **MAKE PROPOSAL TO:**

- 1. ELIMINATE STORING WASTES IN DRUMS AT CERCLA SITES.**
- 2. REDUCE WORKER EXPOSURE.**
- 3. REDUCE COSTS ASSOCIATED WITH DRUMMING.  
TRACKING DRUMS, SHIPPING DRUMS, LAB ANALYSIS  
OF SOIL IN DRUMS.**
- 4. ENHANCE CONTROLS OF SITE.**
- 5. PROVIDE WASTE MINIMIZATION.**
- 6. ENHANCE OPTICS.**

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## SUGGESTED FUTURE ACTIONS

**APPOINT A WORKING TEAM BY JUNE 11, 1990. THE TEAM WOULD BE CHARTERED TO:**

### SHORT TERM:

1. DEFINE A HAZARDOUS WASTE SITE IN NECESSARY DETAIL.
2. DEVELOP PROTOCOL FOR ONSITE WASTE DESIGNATION USING FIELD FIELD SCREENING.
3. SEEK ARAR WAIVER FOR CERCLA WASTE.
4. MODIFY WHC-CM-7-7 BASED UPON WAIVER.

### NET RESULT:

1. REDUCE NUMBER OF DRUMS.
2. REDUCE DRUM MANAGEMENT COSTS APPROPRIATELY.
  - WASTE DESIGNATIONS, INSPECTIONS, REPACKAGING, SHIPPING, ETC.
3. PROVIDE WASTE MINIMIZATION.

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## **LONG TERM:**

1. **INCREASE FIELD SCREENING & ANALYTICAL (ONSITE) CAPABILITIES (TAILOR EFFORT FOR SITE)**
2. **DESIGN AND CONSTRUCT AN ENVIRONMENTALLY SOUND WASTE CONTAINER(S) THAT CAN:**
  - A. **BE SAFELY LEFT ON A RADIOLOGICAL CONTROLLED CERCLA SITE UNTIL REMEDIATION OR;**
  - B. **SAFELY TRANSPORTED TO OTHER TSD FACILITY.**
3. **CONSOLIDATE WASTE THAT NEEDS CONTAINERIZATION INTO A FEW RUGGED, INSPECTABLE AND DURABLE CONTAINERS.**

**COMMITTEE WOULD REPORT STATUS OF EFFORTS  
ON A ROUTINE BASIS.**

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